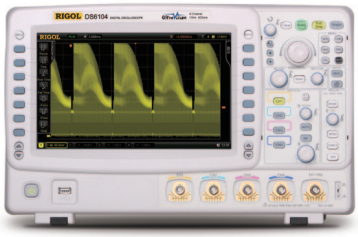
RIGOL

Electronic Measurement Instruments
Selection Guide

RIGOL TECHNOLOGIES, INC.

Digital Oscilloscopes

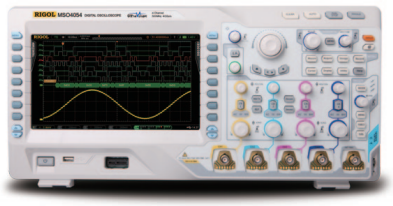


DS6000 Series

DS6104/DS6102 (1GHz)
DS6064/DS6062 (600MHz)

Key Features

- 5GSa/s Real-time Sample Rate
- 140Mpts Memory Depth (Std.)
- 2 or 4 channels
- Up to 180,000wfms/s Waveform Capture Rate
- Up to 200,000frames Real-time Waveform Record
- Serial Buses Triggering (Std.) and Decoding (Opt.)
- 10.1 Inch WVGA (800x480), multiple intensity levels waveform display
- Connectivity: LAN(LXI-C), USB Host& Device, VGA, AUX,USB-GPIB（Opt.）



MSO/DS4000 Series

MSO/DS4054/4052 (500MHz)
MSO/DS4034/4032 (350MHz)
MSO/DS4024/4022 (200MHz)
MSO/DS4014/4012 (100MHz)

Key Features

- 4GSa/s Real-time Sample Rate, Digital channel up to 1G Sa/s（MSO）
- Std. Memory Depth up to 140Mpts, Digital channel up to 28Mpts(MSO)
- 2 or 4 channels; 16 digital channels(MSO)
- Up to 110,000wfms/s Waveform Capture Rate
- Up to 200,000frames Real-time Waveform Record
- Low noise floor, min. vertical sensitivity up to 1 mV/div
- Serial Buses Triggering(Std.) and Decoding (Opt.)
- Cross trigger and time correlation display between all channels (MSO)
- 9 Inch WVGA (800x480), 256 intensity levels waveform display
- Connectivity: LAN(LXI-C)， USB Host& Device, VGA，AUX,USB-GPIB（Opt.）

DS2000A Series

DS2302A/2302A-S (300MHz)
DS2202A/2202A-S (200MHz)
DS2102A/2102A-S (100MHz)
DS2072A/2072A-S (70MHz)

Key Features

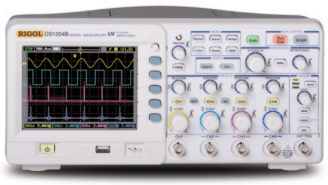
- Bandwidth up to 300MHz,standard with 50Ω input
- Wider vertical range(500uV/div ~ 10V/div), lower noise floor
- Max. Sample Rate 2G Sa/s
- Memory Depth up to 14Mpts(Std.), 56Mpts(Opt.)
- Innovative "UltraVision" Technology
- Waveform capture rate up to 50,000 wfs/s
- Up to 256 Levels intensity grading waveform display
- Up to 65,000 frames Hardware based Real Time waveform
- Record, Replay & Analysis functions(Std.)
- A variety of trigger and serial bus Decoding functions(RS232,I2C,SPI,CAN)
- Built-in 2 Ch Waveform generator (DS2000A-S)
- Complete connectivities: USB Host& Device, LAN(LXI), AUX
- Compact size, light weight, easy to use 8 inch TFT (800x480) WVGA

DS1000Z Series

DS1104Z/1104Z-S (100MHz)
DS1074Z/1074Z-S (70MHz)

Key Features

- 1G Sa/s Real-time Sample Rate, 4 channels
- 12Mpts (Std.) and 24Mpts (Opt.) Memory Depth
- Up to 30,000wfms/s Waveform Capture Rate
- Up to 60,000frames Real-time Waveform Record(Opt.)
- Low noise floor, Dynamic Range: 1mV/div to 10V/div
- Optional Serial Buses Triggering and Decoding
- Built in 2 CH 25MHz waveform Generator(DS1000Z-S)
- 7 Inch WVGA (800x480), multiple intensity levels waveform display
- Connectivity: LAN(LXI Core Device 2011) , USB Host&Device, AUX,USB-GPIB(Opt.)

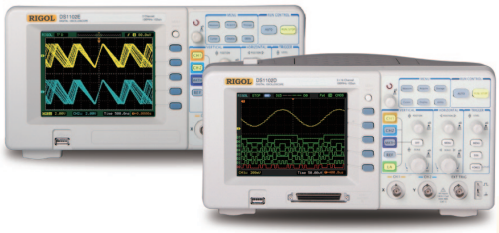


DS1000B Series

DS1204B (200MHz)
DS1104B (100MHz)
DS1074B (70MHz)

Key Features

- 4 Analog Channels
- 2GSa/s Real-time Sample Rate
- Versatile Trigger Functions: Edge, Video, Pulse, Pattern and Alternate
- Waveform Record and Replay function
- Built in FFT and Digital Filters
- Pass/Fail Test
- High Definition Display (320x240)
- Connectivity: USB Host & Device, LAN(LXI-C), Support PictBridge



DS1000 Series

DS1102D (100MHz)　DS1102E (100MHz)
DS1052D (50MHz)　DS1052E (50MHz)

Key Features

- 1G Sa/s Real time Sample Rate
- Memory Depth upto 1Mpts
- 2+16 CH Mixed Signal Oscilloscope(MSO,DS1000D)
- Versatile Trigger Functions: Edge,Video,Pulse,Slope,Aalternate,Pattern (DS1000D),Duration(DS1000D)
- Trigger Sensitivity could be adjusted
- Waveform Record and Replay function
- Built in FFT and Digital Filters
- Pass/Fail Test
- Connectivity: USB Host & Device, RS-232, Support PictBridge

Spectrum Analyzers & RF Source

DSA1000 Series

DSA1030A/DSA1030A–TG (9kHz~3GHz)
DSA1030/DSA1030–TG (9kHz~3GHz)
DSA1020 (9kHz~2GHz)

Key Features

- All-digital IF Technology
- DANL Up to -148dBm(DSA1030A)
- Phase Noise up to -88dBc/Hz (DSA1030A,@10kHz oset)
- Total Amplitude Accuracy:<1.0dB(DSA1030A)
- Min. RBW 10Hz(DSA1030A)
- Std. EMI filters & Quasi-Peak Detector
- 3GHz Tracking Generator (DSA1030A-TG,DSA1030-TG)
- 8.5 Inch WVGA Display (800x480)
- Connectivity: USB Host& Device, LAN(LXI-C), VGA, USB-GPIB(Opt.)

DSA800 Series

DSA815 (9kHz~1.5GHz)
DSA815–TG (9kHz~1.5GHz)

Key Features

- All-digital IF Technology
- DANL Up to -135dBm
- Phase Noise up to -80dBc/Hz @10kHz offset
- Total Amplitude Accuracy: <1.5dB
- Min. RBW 100Hz
- 1.5GHz Tracking Generator (DSA815-TG)
- Optional VSWR and EMI Measurement Kit
- 8 Inch Display (800x480)
- Connectivity: USB Host& Device, LAN(LXI-C), USB-GPIB(Optional)

DSG3000 Series

DSG3030 (9KHz~3GHz)
DSG3060 (9KHz~6GHz)

Key Features

- Max.frequency 3GHz/6GHz
- Amplitude accuracy: <0.5dB (typical)
  Amplitude range: -130 dBm to +13 dBm
- Phase noise: <-110dBc/Hz@20kHz (typical)
- Standard 0.5ppm internal clock;
  5ppb high stable clock (option)
- Standard AM/FM/ΦM analog modulation
- Standard pulse modulation; on-off ratio up to 80dB; customizable pulse train (option)
- Provide I/Q modulation and I/Q baseband output
- Support internal and external modulation modes
- Standard 2U height , provide rack mount kit
- Standard USB/LAN/GPIB interfaces, SCPI command set
- Wear-free electronic attenuator design

Function/Arbitrary Waveform Generators

DG5000 Series

DG5352/DG5351 (350MHz)
DG5252/DG5251 (250MHz)
DG5102/DG5101 (100MHz)
DG5072/DG5071 (70MHz)

Key Features

- 1GSa/s Sample Rate,
- 14bits Vertical Resolution
- Up to 128Mpts Arbitrary Waveform
- 1 or 2 channels
- 2+16 Mixed Signal Source (optional)
- Isolation between 2 Channels
- Frequency/Phase Coupling
- Frequency Hopping(optional)
- IQ Modulation function (standard)
- Waveform Editing PC Software
- Connectivity:LAN(LXI-C), USB Host&Device, USB-GPIB(Optional)

DG4000 Series

DG4162 (160MHz)
DG4102 (100MHz)
DG4062 (60MHz)

Key Features

- Dual Identical Channel
- 500MSa/s Sample Rate
- 14bits Vertical Resolution
- 7digits/s, 200MHz Counter
- 16th Harmonic Generation
- 2ppm High-frequency Stability
- -115dBc/Hz Low Phase Noise
- Built-in 150 Waveforms
- 7 Inch Display (800x480)
- Waveform Editing PC Software
- Connectivity:LAN(LXI-C), USB Host&Device, GPIB

DG1000Z Series

SiFi

DG1032Z (30MHz)
DG1062Z (60MHz)

Key Features

- Innovative SiFi(Signal Fidelity) Technology
- Up to16Mpts(Opt.) Arb Waveform Memory
- Dual Identical Channel
- 200MSa/s Sample Rate
- 14bits Vertical Resolution
- 7digits/s, 200MHz Counter
- 8th Harmonic Generation Function
- ±1ppm High-frequency Stability
- -125dBc/Hz Low Phase Noise
- Std. waveform adding function
- Built-in 160 Waveforms
- Waveform Editing PC Software
- Connectivity:LAN(LXI Core Device 2011), USB Host&Device,USB-GPIB(Optional)

DG1000 Series

DG1022 (20MHz)
DG1022A (25MHz)

Key Features

- Dual Channel Output
- 100MSa/s Sample Rate
- 14bits Vertical Resolution
- 6digits/s, 200MHz Counter
- Built-in 48 Waveforms
- Waveform Editing PC Software
- Connectivity: USB Host & Device

DC Power Supplies

DP1000 Series

DP1308A (3 Outputs： +6V/5A, +25V/1A,-25V/1A)
DP1116A (1 Output with 2 Ranges： 16V/10A or 32V/5A)

Key Features

- DP1116A： 1 Output， DP1308A:3 Outputs
- Low Ripple Noise: <350 uVrms
- Excellent Power Regulation Rate and Load Regulation Rate
- Fast Transient Response Time: <50us
- Channel isolation and Voltage tracking(DP1308A)
- Standard OVP/OCP/OTP protection functions
- Remote Sense Capability(DP1116A)
- Standard Timing function
- Built in V,A,W measurements and waveform display
- Independent control for each channel
- 4.3 Inch TFT Display
- Connectivity: USB Host&Device, LAN(LXI-C), GPIB

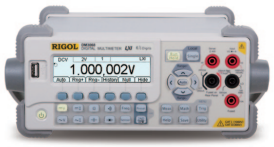
DP800 Series

DP831A (3 Outputs: 8V/5A,+30V/2A,-30V/2A, Max. Total Power 195W)
DP832A (3 Outputs: 30V/3A,30V/3A,5V/3A, Max. Total Power 195W)
DP832 (3 Outputs: 30V/3A,30V/3A,5V/3A, Max. Total Power 195W)
DP811A (1 Output, 2 Ranges: 40V/5A or 20V/10A, Remote Sense, Max. Total Power 200W)
DP821A (2 Outputs: 60V/1A,8V/10A, Remote Sense, Max. Total Power 140W)

Key Features

- 1/2/3 outputs, Total Power up to 200W
- Low Ripple Noise: <350 uVrms/2mVpp
- Excellent Line Regulation Rate and Load Regulation Rate
- Fast Transient Response Time: <50us
- Standard OVP/OCP/OTP protection functions
- Standard Timing function
- Built in V,A,W measurements and waveform display
- Support Output Delay, Analysis, Monitor, Preset functions
- Independent control for each channel
- Inch TFT Display
- Connectivity: USB Host& Device, LAN, RS232, Digital IO,
- USB-GPIB(Opt.)

Digital Multimeters



DM3068

DM3068 (6½ Digits)

Key Features

- 2,200,000 Counts of Resolution
- 0.0035% DC Voltage Accuracy
- Up to 10krdgs/s Measurement Speed
- Max. 10A Current Measurement Range
- Dual Measurements Display
- Real-time Trend and Histogram display
- User Definable Any-sensor function with
- UltraSensor PC sw
- Command compatible with main stream DMMs
- Connectivity: USB Host&Device, RS-232, GPIB, LAN (LXI-C)

DM3058•DM3058E

DM3058/DM3058E (5½ Digits)

Key Features

- 240,000 Counts of Resolution
- 0.015% DC Voltage Accuracy
- Up to 123krdgs/s Measurement Speed
- Max. 10A Current Measurement Range
- Dual Measurements Display
- Real-time Trend and Histogram display
- User Definable Any-sensor function with UltraSensor PC sw
- Ultra View PC software(Optional)
- Command compatible with main stream DMMs
- Support Web remote control
- Connectivity: USB Host&Device, RS-232, GPIB(DM3058), LAN (LXI-C,DM3058)

Data Acquisition/Switch System

M300 Series

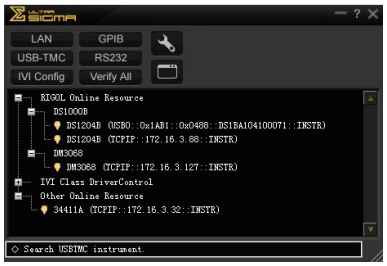
M300/M301

Key Features

- Up to 320 switch channels per main frame
- Can be Run without PC
- USB logging
- Interval scanning with storage of up to 100,000 time-stamped readings
- 10 kinds of cards supported
- 6 1/2 DMM can be enabled/disabled in any of slots
- DCV, DCI, ACV, ACI, 2WR, 4WR, Period, Frequency, Temperature, Any sensor Measurements
- Standard SCPI commands
- 4.3' LCD with intuitive GUI
- Powerful PC software and WebControl
- Complete connectivity: USB Host&Device, GPIB, LAN(LXI-C), RS232

RIGOL Instrument PC Software

RIGOL Universal PC Control Software



Ultra Sigma

Support: All RIGOL new Instruments
OS: Windows XP/7/Vista
Free/Charge: Free

Main Features and Benefits

- Easy connection to RIGOL instruments with GPIB, USB-TMC,LAN, RS-232
- Search RIGOL Instruments
- Interactive control :Send SCPI commands and read responses
- Add, monitor , manage Application softwares
- Parameters configuration

Power supply PC Software

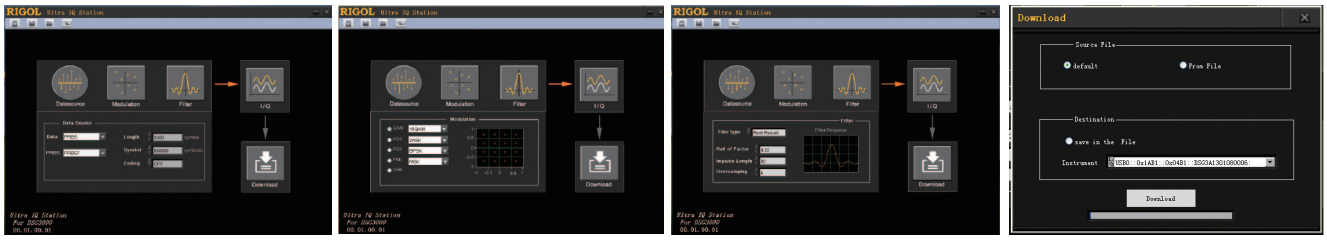
UltraPower

Support: DP1308, DP1116
OS: Windows XP
Free/Charge: Free

Main Features and Benefits

- Setup the parameters of each channel
- On/Off control for each channel
- Output V,A,W waveform display
- V,A,W waveform data storage

DSG3000 RF Source PC Software



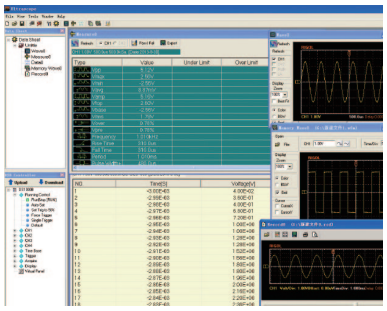
Ultra IQ Station

Support: DSG3030/3060
OS: Windows XP/Vista / 7
Free/Charge:Free

Main Features and Benefits

- Configure the Data source
- Configure the Modulation type
- Configure the filtering
- IQ Waveform/Spectrum/Constellation Display
- Download to instrument or save to a file

Digital Oscilloscope PC Software

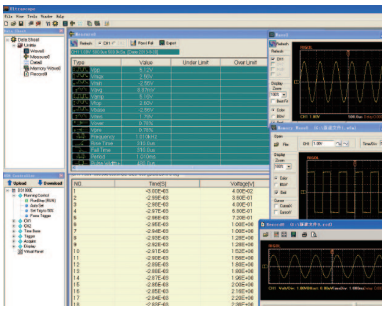


Ultrascope for DS1000B series

Support: DS1000B
OS: Windows 7/XP/2000
Free/Charge: Free

Main Features and Benefits

- Setup each function and parameter of the scope
- Remote control the scope with Virtual Panel
- Show the waveform, data and measurement results
- Replay the recorded waveform
- Save the waveform with Picture or Data format

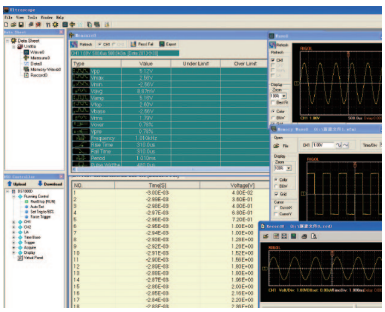


Ultrascope for DS1000D series

Support: DS1000D
OS: Windows XP/2000/NT4.0
Free/Charge: Free

Main Features and Benefits

- Setup each function and parameter of the scope
- Remote control the scope with Virtual Panel
- Show the waveform, data and measurement results
- Replay the recorded waveform
- Save the waveform with Picture or Data format



Ultrascope for DS1000E series

Support: DS1000E
OS: Windows XP/2000/NT4.0
Free/Charge: Free

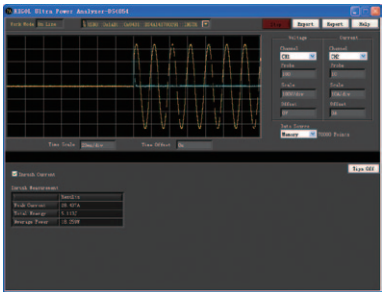
Main Features and Benefits

- Setup each function and parameter of the scope
- Remote control the scope with Virtual Panel
- Show the waveform, data and measurement results
- Replay the recorded waveform
- Save the waveform with Picture or Data format

Power Measurement and Analysis Software

Current Harmonics Analysis

Inrush Current Analysis



Safety Operating Area Analysis

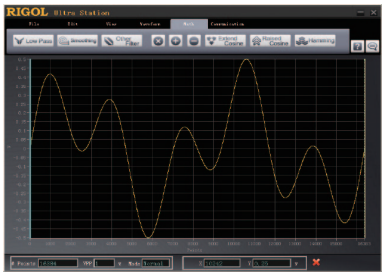
Ultra Power Analyzer

Support: DS4000/MSO4000, DS2000/DS2000A
OS: Windows XP/7/Vista
Free/Charge: Charge (On-line mode)

Main Features and Benefits

- Power quality measurement
- Current Harmonics measurement
- Inrush Current measurement
- Power Device Analysis
- Safe Operating Area analysis
- Modulation measurement
- Output analysis
- Generate Measurement Report

Function/Arbitrary Waveform Generator PC Software

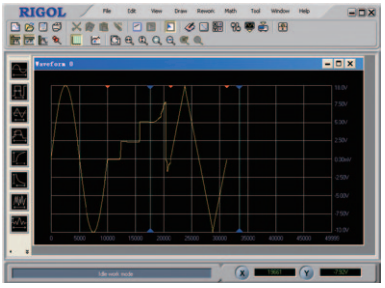


Ultra Station

Support: DG5000/DG4000
OS: Windows XP
Free/Charge: Free/Charge(Opt.)

Main Features and Benefits

- Arbitrary Waveform Edit:
  - Insert Standard Wave
  - Draw waveform
  - Formula Edit(Opt.)
  - Basic Math
  - Filtering &Windowing(Opt.)
- Arbitrary Waveform file import and download

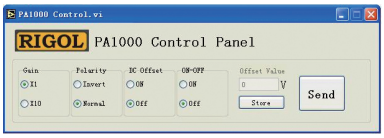


Ultrawave

Support: DG1000/DG2000/DG3000
OS: Windows XP/2000
Free/Charge: Free

Main Features and Benefits

- Arbitrary Waveform Edit:
  - Insert Standard Wave
  - Draw waveform
  - Basic Math
  - Advanced Math
  - Filtering &Windowing
- Arbitrary Waveform file import and download



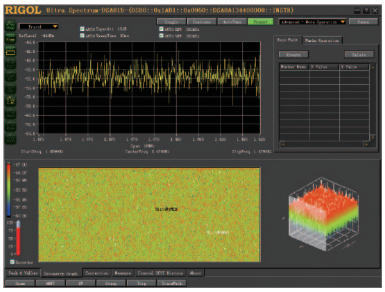
PA1000 Control

Support: PA1000
OS: Windows XP
Free/Charge: Free

Main Features and Benefits

- Control PA1011

Spectrum Analyzer PC Software

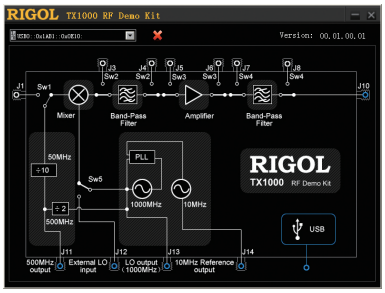


Ultra Spectrum

Support: DSA1030A/1030/1020/815
OS: Windows XP/7/Visa
Free/Charge: Charge

Main Features and Benefits

- Setup each function and parameter of the spectrum analyzer
- Remote control
- Show the spectrum and measurement results
- Water fall and 3-D display
- Save the spectrum with Picture or Data format



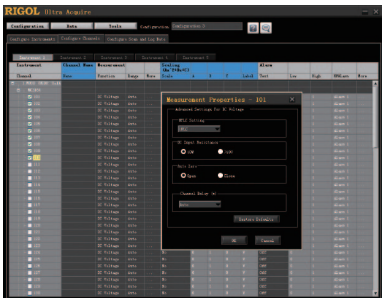
TX1000

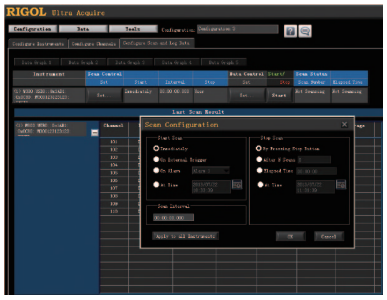
Support: TX1000
OS: Windows XP/7/Visa
Free/Charge: Free

Main Features and Benefits

- Control the electronic switches in the TX1000.
- TX1000 could be controlled by DSA815 directly also.

➤ M300 Data Acquisition PC Software





Ultra Acquire

Support: M300,M301
OS: Windows XP
Free/Charge: Free

Main Features and Benefits

- Channel configuration
- Scan configuration
- Generate the report

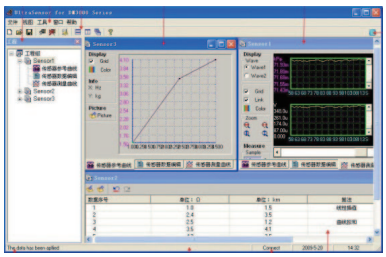
Ultra Acquire Pro

Support: M300,M301
OS: Windows XP
Free/Charge: Charge

Main Features and Benefits (3 additional functions)

- Data re-calculate
- Data print
- All history data display

➤ Digital Multimeter PC Software



Ultra View

Support: DM3058
OS: Windows XP
Free/Charge: Charge

Main Features and Benefits

- Remote control with Virtual Panel
- Data Trend Record, Monitor and Analysis
- Save Data to csv file

Ultra Senser

Support: DM3058/3068
OS: Windows XP/2000/Server2003
Free/Charge: Free

Main Features and Benefits

- Build Sensor Project and Download to DMM
- Real time measure the signal from the sensor,
- Save the measurement result with Data or picture format

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